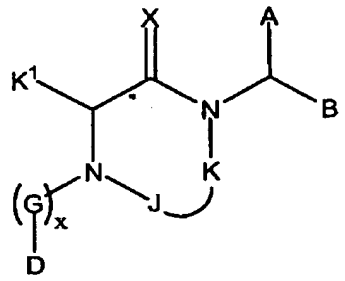
IN THE CLAIMS

The listing of claims herein will replace all prior versions and listings of claims in the application.

1. (Currently amended) A compound of formula (I):



(I)

and pharmaceutically acceptable salts~~derivatives~~ thereof, wherein:

A and B are independently selected from -CH_2-CH_2-E or –CH_2–CH_2-CH_2-E; ~~E, (C_1-C_{10}) straight or branched alkyl, (C_2-C_{10}) straight or branched alkenyl or alkynyl, or (C_5-C_7) cycloalkyl or cycloalkenyl; wherein 1 or 2 hydrogen atoms in said alkyl, alkenyl or alkynyl are optionally and independently replaced with E, (C_5-C_7) cycloalkyl or cycloalkenyl; and wherein 1 to 2 methylene (-CH_2-) groups in said alkyl, alkenyl, or alkynyl groups are optionally and independently replaced by -O-, -S-, -S(O)-, -$S(O)_2$-, =N-, -N= or -$N(R^3)$-;~~

~~or B is hydrogen;~~

~~wherein R^3 is selected from hydrogen, (C_1-C_4) straight or branched alkyl, (C_3-C_4) straight or branched alkenyl or alkynyl, or (C_1-C_4) bridging alkyl, wherein said bridge is formed between the nitrogen atom to which said R^3 is bound and any carbon atom of said alkyl, alkenyl or alkynyl to form a ring, and wherein said ring is optionally benzofused;~~

wherein E is phenyl, furyl, thienyl, pyridyl, pyrrolyl, oxazolyl, thiazolyl, imidazolyl, pyrazolyl, isoxazolyl, triazolyl, oxadiazolyl, pyrimidinyl, pyrazinyl, indolyl, isoindolyl, benzimidazolyl, benzothiophenyl, quinolinyl, isoquinolinyl, and benzothiazolyl; ~~a saturated, partially saturated or unsaturated, or aromatic monocyclic or bicyclic ring system, wherein each ring comprises 5 to 7 ring atoms independently selected from C, N, O or S; and wherein no more than 4 ring atoms are selected from N, O or S;~~

wherein 1 to 4 hydrogen atoms in E are optionally and independently replaced with halogen, hydroxyl, hydroxymethyl, nitro, SO_3H, trifluoromethyl, trifluoromethoxy, (C_1-C_6)-straight or branched alkyl, (C_2-C_6)-straight or branched alkenyl, O-[(C_1-C_6)-straight or branched alkyl], O-[(C_3-C_6)-straight or branched alkenyl], $(CH_2)_n-N(R^4)(R^5)$, $(CH_2)_n-NH(R^4)-(CH_2)_n-Z$, $(CH_2)_n-N(R^4-(CH_2)_n-Z)(R^5-(CH_2)_n-Z)$, $(CH_2)_n-Z$, $O-(CH_2)_n-Z$, $(CH_2)_n-O-Z$, $S-(CH_2)_n-Z$, CH=CH-Z, 1,2-methylenedioxy, C(O)OH, C(O)O-[(C_1-C_6)-straight or branched alkyl], $C(O)O-(CH_2)_n-Z$ or $C(O)-N(R^4)(R^5)$;

wherein each of R^4 and R^5 are independently hydrogen, (C_1-C_6)-straight or branched alkyl, (C_3-C_5)-straight or branched alkenyl, or wherein R^4 and R^5, when bound to the same nitrogen atom, are taken together with the nitrogen atom to form a 5 or 6 membered ring, wherein said ring optionally contains 1 to 3 additional heteroatoms independently selected from N, O or S; wherein said alkyl, alkenyl or alkynyl groups in R_4 and R_5 are optionally substituted with Z.

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each n is independently 0 to 4;

each Z is independently selected from a saturated, partially saturated or unsaturated, monocyclic or bicyclic ring system, wherein each ring comprises 5 to 7 ring atoms independently selected from C, N, O or S; and wherein no more than 4 ring atoms are selected from N, O or S;

wherein 1 to 4 hydrogen atoms in Z are optionally and independently replaced with halo, hydroxy, nitro, cyano, C(O)OH, (C_1-C_3)-straight or branched alkyl, O-(C_1-C_3)-straight or branched alkyl, C(O)O-[(C_1-C_3)-straight or branched alkyl], amino, NH[(C_1-C_3)-straight or branched alkyl], or N-[(C_1-C_3)-straight or branched alkyl]$_2$;

K^1 is selected from hydrogen, E, (C_1-C_6)-straight or branched alkyl, (C_2-C_6)-straight or branched alkenyl or alkynyl, wherein 1 to 2 hydrogen atoms in said alkyl, alkenyl or alkynyl is optionally and independently replaced with E;

wherein K^1 is optionally substituted with up to 3 substituents selected from halogen, OH, O-(C_1-C_6)-alkyl, O-(CH$_2$)n-Z, NO_2, CO_2H, C(O)-O-(C_1-C_6)-alkyl, $C(O)NR^4R^5$, NR^4R^5 and $(CH_2)_n-Z$;

J and K, taken together with the two nitrogens that they are attached to, form a 6~~5~~-~~7~~ membered piperazine ~~saturated or unsaturated heterocyclic~~ ring, ~~wherein 1 to 2 hydrogen atoms in said ring are optionally and independently replaced with (C_1-C_6) straight or branched alkyl, (C_2-C_6) straight or branched alkenyl or alkynyl,~~

~~oxo, hydroxyl or Z; and wherein any CH_2 group in said heterocyclic ring is optionally and independently replaced by O, S, S(O), $S(O_2)$, or $N(R^3)$; and wherein said ring is optionally fused with E;~~

G, when present, is $-S(O)_2-$, -C(O)-, $-S(O)_2-Y-$, -C(O)-Y-, -C(O)-C(O)-, or -C(O)-C(O)-Y-;

Y is oxygen, or $N(R^6)$;

wherein R^6 is hydrogen, E, (C_1-C_6)-straight or branched alkyl, (C_3-C_6)-straight or branched alkenyl or alkynyl; ~~or wherein R^6 and D are taken together with the atoms to which they are bound to form a 5 to 7 membered ring system wherein said ring optionally contains 1 to 3 additional heteroatoms independently selected from O, S, N, NH, SO, or SO_2; and wherein said ring is optionally benzofused;~~

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D is ~~hydrogen,~~ (C_1-C_7)-straight or branched alkyl, (C_2-C_7)-straight or branched alkenyl or alkynyl, (C_5-C_7)-cycloalkyl or cycloalkenyl optionally substituted with (C_1-C_6)-straight or branched alkyl or (C_2-C_7)-straight or branched alkenyl or alkynyl, $[(C_1-C_7)$-alkyl]-E, $[(C_2-C_7)$-alkenyl or alkynyl]-E, or ~~E~~;

D is an aromatic monocyclic or bicyclic ring system, wherein each ring comprises 5 to 7 ring atoms independently selected from C, N, O or S; and wherein no more than 4 ring atoms are selected from N, O or S;

wherein 1 to 2 of the CH_2 groups of said alkyl, alkenyl or alkynyl chains in D is optionally replaced by –O-, -S-, -S(O)-, $-S(O_2)-$, or $-N(R^3)$;

~~provided that when J is hydrogen or G is selected from $S(O)_2$, C(O)C(O), SO_2-Y, or C(O)-Y, or C(O)C(O)-Y, wherein Y = O; then D is not hydrogen;~~

x = 0 or 1; and

X = O or two hydrogens attached to ring carbon.

2. (Currently amended) The compound according to claim 1, wherein:

each of A and B is independently selected from $-CH_2-CH_2-E$ or $-CH_2-CH_2-CH_2-E$; and

E is phenyl;~~a monocyclic or bicyclic aromatic ring system, wherein said ring comprises 5-7 ring atoms independently selected from C, N, O or S, and wherein 1 to 4 ring atoms are independently selected from N, O or S;~~

wherein 1 to 4 hydrogen atoms in E are optionally and independently replaced with halogen, hydroxyl, hydroxymethyl, nitro, SO_3H, trifluoromethyl, trifluoromethoxy, (C_1-C_6)-straight or branched alkyl, (C_2-C_6)-straight or branched

alkenyl, O-[(C_1-C_6)-straight or branched alkyl], O-[(C_3-C_6)-straight or branched alkenyl], $(CH_2)_n$-$N(R^4)(R^5)$, $(CH_2)_n$-$NH(R^4)$-$(CH_2)_n$-Z, $(CH_2)_n$-$N(R^4$-$(CH_2)_n$-$Z)(R^5$-$(CH_2)_n$-Z), $(CH_2)_n$-Z, O-$(CH_2)_n$-Z, $(CH_2)_n$-O-Z, S-$(CH_2)_n$-Z, CH=CH-Z, 1,2-methylenedioxy, C(O)OH, or C(O)-$N(R^4)(R^5)$.

3. (Canceled).

4. The compound according to claim 2~~3~~, wherein D is substituted phenyl.

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5. The compound according to claim 1, wherein K^1 is selected from E, (C_1-C_6)-straight or branched alkyl, (C_2-C_6)-straight or branched alkenyl or alkynyl, wherein 1 to 2 hydrogen atoms in said alkyl, alkenyl or alkynyl is optionally and independently replaced with E;

wherein K^1 is substituted with up to 3 substituents selected from halogen, OH, O-(C_1-C_6)-alkyl, O-(CH_2)n-Z, NO_2, CO_2H, C(O)-O-(C_1-C_6)-alkyl, $C(O)NR^4R^5$, NR^4R^5 and $(CH_2)_n$-Z.

6. The compound according to claim 1~~2~~, wherein each of A and B is independently selected from -CH_2-CH_2-E or –CH_2–CH_2-CH_2-E; and

E is pyridyl.

7. A composition comprising a compound according to claim 1 and a carrier.

8. (Canceled).

9. (Canceled).

10. (Canceled).

11. (Currently amended) A method for stimulating neuronal regeneration or preventing neuronal damage or neurodegeneration in a patient or in an *ex vivo* nerve cell, comprising the step of administering to said patient or said nerve cell a therapeutically effective amount of compound according to any one of claims 1-6.

12. (Currently amended) The method according to claim 11, wherein said compound is administered to a patient in a therapeutically effective amount and is formulated together with a pharmaceutically suitable carrier into a pharmaceutically acceptable composition.

13. (Canceled).

14. (Canceled).

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15. (Canceled).

16. (Canceled).

17. (Canceled).

18. (Canceled).

19. (Canceled).

20. (Canceled).

REMARKS

THE RESTRICTION

The Examiner has required an election under 35 U.S.C. § 121 to one of the following five groups:

I. Claims 1-7, 11-12, drawn to a compound of formula I, wherein J and K taken together with the two nitrogen atoms form a five-membered ring, compositions thereof, and methods therewith;

II. Claims 1-7, 11-12, drawn to a compound of formula I, wherein J and K taken together with the two nitrogen atoms form a six-membered ring, namely, piperazine, compositions thereof, and methods therewith;